

Listing of Claims:

1. (Currently Amended) ~~Method~~ A method for optimizing data transmission in a telephone network, ~~characterized in that the method comprises at least steps, in which the~~ method comprising the steps of:

~~[[-]] examining at a first switching network element (10b) examines (200, 305, 310), if the whether an~~ [[-]] examining at a first switching network element (10b) examines (200, 305, 310), if the whether an incoming leg of a user data connection is transmitted from a second switching network element (10a) via a packet data network and if ~~the whether an~~ the whether an outgoing leg of the same user data connection is transmitted to a third switching network element (10e) via said packet data network[[,]];

~~[[-]] indicating an address of said packet data network corresponding to the other of said second and third switching network elements from said first switching network element to one of said second and third switching network elements if both the incoming and the outgoing legs are transmitted via said packet data network[[,]] said first switching network element indicates (210, 320) to one of said second and third switching network elements an address of said packet data network corresponding to the other of said second and third switching network elements; and~~ [[-]] indicating an address of said packet data network corresponding to the other of said second and third switching network elements from said first switching network element to one of said second and third switching network elements if both the incoming and the outgoing legs are transmitted via said packet data network[[,]] said first switching network element indicates (210, 320) to one of said second and third switching network elements an address of said packet data network corresponding to the other of said second and third switching network elements; and

~~releasing said first switching network element releases the user data connection between said first switching network element and said one of said second and third switching network elements via said first switching network element.~~ releasing said first switching network element releases the user data connection between said first switching network element and said one of said second and third switching network elements via said first switching network element.

2. (Canceled)

3. (Currently Amended) ~~A~~ The method according to ~~of~~ of claim 1, ~~characterized in that said~~ wherein one of said second and third switching network elements is comprises said second switching network element and ~~said the~~ the other of said second and third switching network elements is comprises said third switching network element.

4. (Currently Amended) A ~~The method according to~~ of claim 1, ~~characterized in that~~
wherein said packet data network is comprises an internet protocol (IP) network and said address
of said packet data network is comprises an IP address.

5. (Currently Amended) A ~~The method according to~~ of claim 4, ~~characterized in that~~
wherein said address of said packet data network is comprises an IPv4 address ~~according to~~ in
accordance with RFC 791.

6. (Currently Amended) A ~~The method according to~~ of claim 4, ~~characterized in that~~
wherein said address of said packet data network is comprises an IPv6 address ~~according to~~ in
accordance with RFC 1883.

7. (Currently Amended) A ~~The method according to~~ of claim 1, ~~characterized in that~~
wherein said address corresponding to ~~said~~ one of said second and third switching network
elements is indicated to ~~said~~ the other of said second and third switching network elements
~~switching element~~ using (210) a call control release message.

8. (Currently Amended) A ~~The method according to~~ of claim 7, ~~characterized in that~~
wherein said indication is attached (210) ~~to a~~ to an Integrated Services Digital Network (ISDN)
User Part (ISUP) RELEASE message.

9. (Currently Amended) A ~~The method according to~~ of claim 1, ~~characterized in that~~
wherein said connection is comprises a speech data connection.

10. (Currently Amended) A ~~The method according to~~ of claim 1, ~~characterized in that~~
wherein said switching network element is comprises a network element of a cellular
telecommunications network.

11. (Currently Amended) A ~~The method according to~~ of claim 1, ~~characterized in that~~
wherein said switching network element is comprises a mobile services switching center (MSC)
of a cellular telecommunications network.

12. (Currently Amended) A The method ~~according to~~ of claim 11, ~~characterized in that~~ wherein said switching network element ~~is~~ comprises a MSC of a Global System for Mobile Communications (GSM) network.

13. (Currently Amended) A The method ~~according to~~ of claim 11, ~~characterized in that~~ wherein said switching network element ~~is~~ comprises a MSC of a Universal Mobile Telecommunications System (UMTS) network.

14. (Currently Amended) A switching network element (400) of a telephone network, ~~characterized in that the network element comprises at least~~ the network element comprising:

[[-]] means (453) for examining ~~the~~ incoming and ~~outeoming~~ outgoing legs of connections and for producing an output if both ~~said~~ legs of a the connection are transmitted via a packet data network instead of a circuit-switched connection[[,]];

[[-]] means (454) for indicating a packet data network address corresponding to one of the switching network element at ~~the~~ a receiving end of said outgoing leg and the switching network element at ~~the~~ an originating end of said incoming leg to ~~the other of the~~ another switching network element at the receiving end of said outgoing leg and the switching network element at the originating end of said incoming leg as a response to said output[[,]]; and

[[-]] means (455) for sending a connection release message as a the response to said output to ~~said~~ one of the switching network ~~element~~ elements at the receiving end of said outgoing leg and the switching network element at the originating end of said incoming leg;

means for releasing the user data connection between the switching network element at the originating end of said incoming leg and one of the switching network elements at the receiving end of said outgoing leg.

15. (Currently Amended) A The switching network element ~~according to~~ of claim 14, ~~characterized in that said~~ wherein one of the switching network element at the receiving end of

12. (Currently Amended) A ~~The~~ method ~~according to~~ of claim 11, ~~characterized in that~~ wherein said switching network element is comprises a MSC of a Global System for Mobile Communications (GSM) network.

13. (Currently Amended) A ~~The~~ method ~~according to~~ of claim 11, ~~characterized in that~~ wherein said switching network element is comprises a MSC of a Universal Mobile Telecommunications System (UMTS) network.

14. (Currently Amended) A switching network element (400) of a telephone network, ~~characterized in that the network element comprises at least~~ the network element comprising:

[[-]] means (453) for examining ~~the~~ incoming and ~~outcoming~~ outgoing legs of connections and for producing an output if both ~~said~~ legs of a connection are transmitted via a packet data network instead of a circuit-switched connection[[,]];

[[-]] means (454) for indicating a packet data network address corresponding to one of the switching network element at ~~the~~ a receiving end of said outgoing leg and the switching network element at ~~the~~ an originating end of said incoming leg to ~~the other of the~~ another switching network element at the receiving end of said outgoing leg and the switching network element at the originating end of said incoming leg as a response to said output[[,]]; and

[[-]] means (455) for sending a connection release message as a the response to said output to ~~said~~ one of the switching network element elements at the receiving end of said outgoing leg and the switching network element at the originating end of said incoming leg;

means for releasing the user data connection between the switching network element at the originating end of said incoming leg and one of the switching network elements at the receiving end of said outgoing leg.

15. (Currently Amended) A ~~The~~ switching network element ~~according to~~ of claim 14, ~~characterized in that said~~ wherein one of the switching network element at the receiving end of

said outgoing leg and the switching network element at the originating end of said incoming leg is comprises the switching network element at the receiving end of said outgoing leg; and ~~said~~ the other of the switching network element at the receiving end of said outgoing leg and the switching network element at the originating end of said incoming leg is comprises the switching network element at the originating end of said incoming leg.

16. (Currently Amended) A The switching network element ~~according to~~ of claim 14, wherein the switching network element is comprises a network element of a cellular telecommunications network.

17. (Currently Amended) A The switching network element ~~according to~~ of claim 14, wherein the switching network element is comprises a mobile services switching center (MSC) of a cellular telephone network.

18. (Currently Amended) A The switching network element ~~according to~~ of claim 14, wherein the switching network element is comprises a mobile services switching center (MSC) of a Global System for Mobile Communications (GSM) network.

19. (Currently Amended) A The switching network element ~~according to~~ of claim 14, wherein the switching network element is comprises a mobile services switching center (MSC) of a Universal Mobile Telecommunications System (UMTS) network.